BEFORE
THE PUBLIC SERVICE COMMISSION
OF SOUTH CAROLINA

Docket No. 2017-229-EG

Nancy Hammack, Complainant/Petitioner, v. Duke Energy Carolinas, LLC and Piedmont Natural Gas Company, Inc., Defendant/Respondents.	)	**PIEDMONT NATURAL GAS COMPANY, INC.'S MOTION FOR JUDGMENT AS A MATTER OF LAW AND REQUEST TO HOLD DEADLINES AND HEARING IN ABEYANCE**

Piedmont Natural Gas Company, Inc. ("Piedmont" or the "Company") respectfully moves for an order granting it judgment as a matter of law in the above-referenced docket pursuant to S.C. Code Ann. §58-5-270 and 10 S.C. Code Regs. 103-829 and other applicable rules of practice and procedure of the Public Service Commission of South Carolina (the "Commission"). Piedmont respectfully requests that filing deadlines for all parties and the hearing date be held in abeyance pending resolution of this motion.

BACKGROUND

On July 13, 2017, Nancy Hammack ("Ms. Hammack") filed a complaint with the Commission requesting removal of Piedmont's Automatic Meter Reading ("AMR") meter from her residence located at 111 Arabian Way, Simpsonville, South Carolina (the "Residence"). Ms. Hammack further requested that Piedmont replace the AMR meter with an analog meter with no electronics at no cost or expense to her. Ms. Hammack alleges Piedmont's AMR meter was installed without her knowledge or consent and that the presence of the AMR meter impacts her health.

Piedmont's records indicate that Piedmont installed an Encoder Receiver Transmitter ("ERT") mechanism on the meter at Ms. Hammack's residence in October of 2006, slightly more than one month before Ms. Hammack became a Piedmont customer at this address. Pritchard Affidavit at ¶ 7. The ERT mechanism installed at 111 Arabian Way, Simpsonville, South Carolina is a small battery operated device contained within the meter itself that transmits natural gas consumption information to collection equipment in a passing meter reading vehicle. The ERT mechanism only transmits information (i.e. emits a low power radio signal) for a few seconds a month when specifically queried by the collection equipment installed on Piedmont's meter reading vehicles. No changes to the ERT mechanism installed at Ms. Hammack's residence have been made since it was installed in 2006 and gas consumption has been read utilizing this device since that time. Pritchard Affidavit at ¶ 8. The installation of the ERT mechanism at Ms. Hammack's residence was part of a Company-wide transition to automatic meter reading technology and replaced an earlier analog meter device which required manual reads to record usage and prepare bills. Harteis Affidavit at ¶¶ 6-7.

As part of Piedmont's conversion to AMR technology, which it adopted in all three states in which it operates, Piedmont exchanged or converted all non-communicating analog meters to AMR meters through the addition of ERT devices similar to that installed at Ms. Hammack's Residence. Harteis Affidavit at ¶¶ 6-9. The AMR Meters allow Piedmont to gather natural gas usage information via a low-power radio signal in the 900 MHz range that is read by equipment installed in Piedmont's meter reading vehicles as they pass by locations where such meters are installed. Harteis Affidavit ¶ 10. Piedmont's meter serving Ms. Hammack's residence is fully compliant with all applicable regulations of the Federal Communications Commission ("FCC") – the federal agency responsible for determining the safety of and controlling spectrum

requirements relative to devices that emit electromagnetic radiation. Harteis Affidavit at ¶ 12 and Exhibits A and B.[1] Piedmont's conversion to AMR technology was not controversial at the time it was undertaken and was generally known to the Commissions and consumer advocates in all three states in which Piedmont operated at the time it occurred. In addition, Piedmont sent its customers notice of the conversion and information relevant to the process, including information about the ERT device, prior to the conversion. Pritchard Affidavit at Exhibit A. Since it has completed its conversion, Piedmont has received very few, if any, complaints about the new process or equipment.

Utilization of AMR technology by Piedmont, which has been in use across three different states by the Company for approximately ten years, is a far more efficient, less costly, and more accurate method of measuring customer usage than Piedmont's previous manual meter-reading methods. Harteis Affidavit ¶¶ 6-11. In fact, Piedmont no longer utilizes manual reading as a regular means of collecting customer usage information for residential customer billing in any of the states in which it operates. Pritchard Affidavit ¶10.

As a regulated utility provider of natural gas service in South Carolina, Piedmont provides all natural gas meters. Piedmont's service regulations, approved by this Commission, control the manner of the Company's provision of natural gas service and reserve to the Company the right to install meters, including meters which can be read remotely using radio frequency or other automated meter reading technology. There is no provision of the Commission's regulations or Piedmont's approved tariffs that provide Customers with the right

[1] Exhibit A is a picture of a Piedmont ERT device similar to the one installed at Ms. Hammack's residence illustrating the FCC ID no. for this device of EWQ100GDLAS and model designation of 1S. Exhibit A also reflects an Underwriters Laboratory registration for the device. Exhibit B is a test report downloaded from the FCC's website showing compliance testing results for the ERT model at issue in this proceeding illustrating that radio emissions from the device are well within with FCC's maximum permissible exposure limits for this particular equipment.

to select (or control) the style, manufacture, or other specifications relating to the type of meter used by Piedmont, or its method of reading meters. To the contrary, the right to select, own, and install meters on Piedmont's system are specifically reserved to Piedmont in its approved South Carolina Service Regulations.[2]

ARGUMENT

There is no material fact in dispute in this case. Service to Ms. Hammack's Residence is being provided in accordance with the Company's service regulations as approved by this Commission utilizing equipment that is compliant with federal regulations and in wide, and non-controversial, use throughout the United States and which operates no more than a few seconds each month.

1. Compliance with Service Regulations.

As contemplated by its Service Regulations, Piedmont made the determination of what type of meter would be installed at the Residence occupied by Ms. Hammack. Section 13 of Piedmont's Service Regulations provides that Piedmont will furnish all meters for the measurement of service. These Service Regulations were most recently approved by the Commission by Order No. 2017-257 in Docket No. 2017-71-G. The Commission has broad authority to regulate the manner in which Piedmont, as a natural gas utility, provides service to its customers. See S.C. Code Ann. §§58-5-210, 58-3-140. Piedmont's provision of service, including the way in which natural gas use is measured, is in accordance with the approved Service Regulations and Piedmont is entitled to judgment as a matter of law.

2. Meter Compliance

The natural gas meter serving the Residence at issue is in compliance with FCC standards and the Commission's regulations. The meter installed at this location uses a 900 MHz radio

[2] See paragraphs 2(j), 13 and 16 of Piedmont's approved South Carolina Service Regulations.

frequency and has been tested and complies with applicable FCC rules and guidelines. Harteis Affidavit at ¶ 12 and Exhibits A and B.

Nearly every household device that is powered by electricity emits electromagnetic frequencies in some amount. The ERT device installed at Ms. Hammack's residence emits a fraction of the types of radio frequency emissions that come from cellular phones, microwave ovens, and many other household devices in use today. The FCC sets exposure limits for all these types of devices, including the ERT device incorporated into Piedmont's meter, and each device must be certified as compliant with FCC standards. The FCC classifies devices into three categories – intentional radiators, unintentional radiators, and incidental radiators.

- The typical devices that fall into the intentional radiator category include cordless telephones, remote control toys, garage door openers, wireless routers, baby monitors, and any mobile data devices such as cellular phones and tablets. Any communicating meter (AMR or AMI) also falls into this category.

- Unintentional radiators are devices that generate RF signals, but are not intended to emit RF. These include such things as personal computers, printers, automobile dashboard electronics, radio receivers, televisions, and any other devices that have an internal "clock" within the device.

- Incidental radiators are devices that generate RF energy during the course of their operation, but are not designed to generate or emit RF energy. This category would include automobile ignition systems, ceiling fans, vacuum cleaners, electric shavers, and mechanical light switches.

FCC standards for intentional and unintentional radio emissions and safety related to RF exposure, Parts 1 and 2 of the FCC's Rules and Regulations (47 C.F.R. 1.1307(b), 1.1310, 2.1091, 2.1093), govern the certification and design of all the devices mentioned above including communicating meters. The meter serving the Residence is in compliance with FCC standards and the Commission's regulations. Harteis Affidavit at ¶ 12 and Exhibits A and B.

Given these facts, to allow Ms. Hammack to move forward with her claim would be an inappropriate use of time and resources of the Commission and the Company. Piedmont is entitled to judgment in its favor as a matter of law.

3. Relief Requested

The Commission is a government agency of limited power and jurisdiction, which is conferred either expressly or impliedly by the General Assembly. *Kiawah Property Owners Group v. Public Service Com'n*, 359 S.C. 105, 597 S.E.2d 145 (Sup. Ct. 2004). The Commission's complaint jurisdiction in this case is specified in S.C. Code Annotated Section 58-5-270 which grants the Commission authority to hear complaints relating to any "act or thing done, or omitted to be done, with respect to which, under the Provisions of Articles 1, 3, and 5 of this chapter the commission has jurisdiction." And while the authority granted the Commission to supervise Piedmont's operations in Articles 1, 3, and 5 of Chapter 58 is broad, it does not extend to the right to determine or specify which types or amounts of electromagnetic radiation may be safely used in AMR devices. That authority instead lies with the FCC and under the facts of this case, the device challenged by Ms. Hammack is plainly in compliance with FCC regulations.

Ms. Hammack generally asserts in her complaint that her health is being impacted by RF emissions but does not provide any specificity as to the nature of these alleged impacts or the causal mechanism allegedly causing the impacts. Further, concerns over the possibility of harm from electromagnetic emissions in natural gas AMR equipment are more appropriately addressed to the FCC whose jurisdiction, regulations, rules, standards and guidelines are specifically designed to address such concerns. Finally, Ms Hammack has been served for over 10 years with an AMR Meter which incorporates an RF transmission ERT device and which is fully

compliant with federal regulations, consistent with Piedmont's approved Service Regulations. These devices are in broad use throughout the industry and, in any event, operate only seconds per month. Under these facts, Ms. Hammack has no basis for relief and judgment should be granted to Piedmont and this case dismissed.

CONCLUSION

Piedmont is entitled to judgment as a matter of law based on the information and affidavits submitted in this case. The Piedmont investigation determined that the meters are in compliance with the FCC standards and Commission regulations. Therefore, there is no genuine issue as to any material fact and Piedmont is entitled to judgment as a matter of law.

WHEREFORE, Piedmont Natural Gas Company, Inc. moves the Commission to grant it judgment as a matter of law and dismiss the Complaint with prejudice, hold the testimony deadlines for all parties and the hearing in abeyance pending resolution of this motion, and requests such other relief as the Commission deems just and proper.

Respectfully submitted this 24th day of August, 2017.

/s/ Scott M. Tyler
Scott M. Tyler
Attorney for Piedmont Natural Gas Company, Inc.

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the attached document is being served this date via email and UPS Overnight upon:

Jeffrey M. Nelson
Office of Regulatory Staff
1401 Main Street
Suite 900
Columbia, South Carolina 29201
jnelson@regstaff.sc.gov

And that a copy of the attached document is being served this date via email or U.S. Mail upon:

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This the 24th day of August, 2017.

/s/ Richard K. Goley
Richard K. Goley

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Docket No. 2017-229-EG

Nancy Hammack, Complainant/Petitioner, v. Piedmont, LLC and Piedmont Natural Gas Company, Inc., Defendant/Respondents.	)	**AFFIDAVIT OF WESLEY HARTEIS**

The undersigned, being duly sworn, deposes and says:

1. My name is Wesley Harteis and I am a Supervisor of Meter Reading Services for Piedmont Natural Gas Company, Inc. ("Piedmont"). My office is located at 4339 South Tryon Street, Charlotte, North Carolina. I have worked for Piedmont since 2003.

2. My current job responsibilities include supervision of the collection of customer usage data and management of our Automatic Meter Reading ("AMR") technology used in that process.

3. This affidavit is based upon my personal knowledge and review of documents received and maintained in the ordinary course of business by Piedmont. I am familiar with the records of Piedmont that pertain to the residential account for 111 Arabian Way, Simpsonville, South Carolina ("Premises"). I have personally worked on said documents and records, and as to the following facts, I know them to

be true of my own knowledge or I have gained knowledge of them from the business records of Piedmont, which were made at or about the time of the events, recorded, and which are maintained in the ordinary course of business by Piedmont. If called as a witness, I could and would testify to the same.

4. I assisted our attorneys in preparing Piedmont's Motion for Judgment as a Matter of Law and Request to Hold Deadlines and Hearing in Abeyance ("Motion"). I have read the Motion and verify that the information contained within the Motion is accurate and true to the best of my knowledge, information, and belief.

5. When Complainant established service at the end of 2006, Piedmont had already installed an Encoder Receiver Transmitter ("ERT") mechanism at the Premises.

6. Prior to utilizing an ERT mechanism, Piedmont relied on an analog meter device, which required manual reads to record usage and prepare bills.

7. The installation of the ERT mechanism at the Premises was part of Piedmont's company-wide transition to AMR technology.

8. As part of Piedmont's conversion to AMR technology, which it adopted in all three states in which it operates, Piedmont exchanged or converted all non-communicating analog meters to AMR meters through the addition of the ERT devices.

9. Piedmont has utilized AMR technology across the three states in which it operates for approximately ten years.

10. The AMR meters allow Piedmont to gather natural gas usage from the meters via a low-power radio signal in the 900 MHz range that is read by equipment

installed in Piedmont's meter reading vehicles as they pass by locations where such meters are installed.

11. AMR technology is more efficient, less costly, and a more accurate method of measuring customer usage than Piedmont's previous manual meter-reading methods.

12. All of Piedmont's AMR Meters are certified by their manufacturer to comply with Federal Communications Commission ("FCC") rules and guidelines which set exposure limits for all types of devices that emit electromagnetic frequencies.

13. Exhibit A attached hereto is a photograph of an ERT device similar to that installed at the Premises.

14. Exhibit B attached hereto is a test report, downloaded from the FCC's website, demonstrating compliance by the ERT model installed at the Premises with applicable FCC transmission limits.

This the 24th day of August, 2017.

Wesley Harter

Mecklenburg County, North Carolina
Signed and sworn to before me this day by Ronette R Caldwell

Date: 8-24-2017

Ronette R Caldwell
Notary Public

My commission expires: June 29, 2022

(Official Seal)

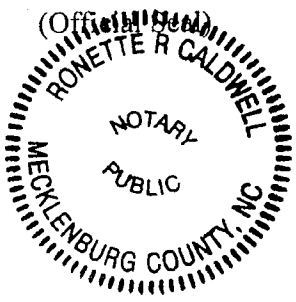

EXHIBIT A

Exhibit A

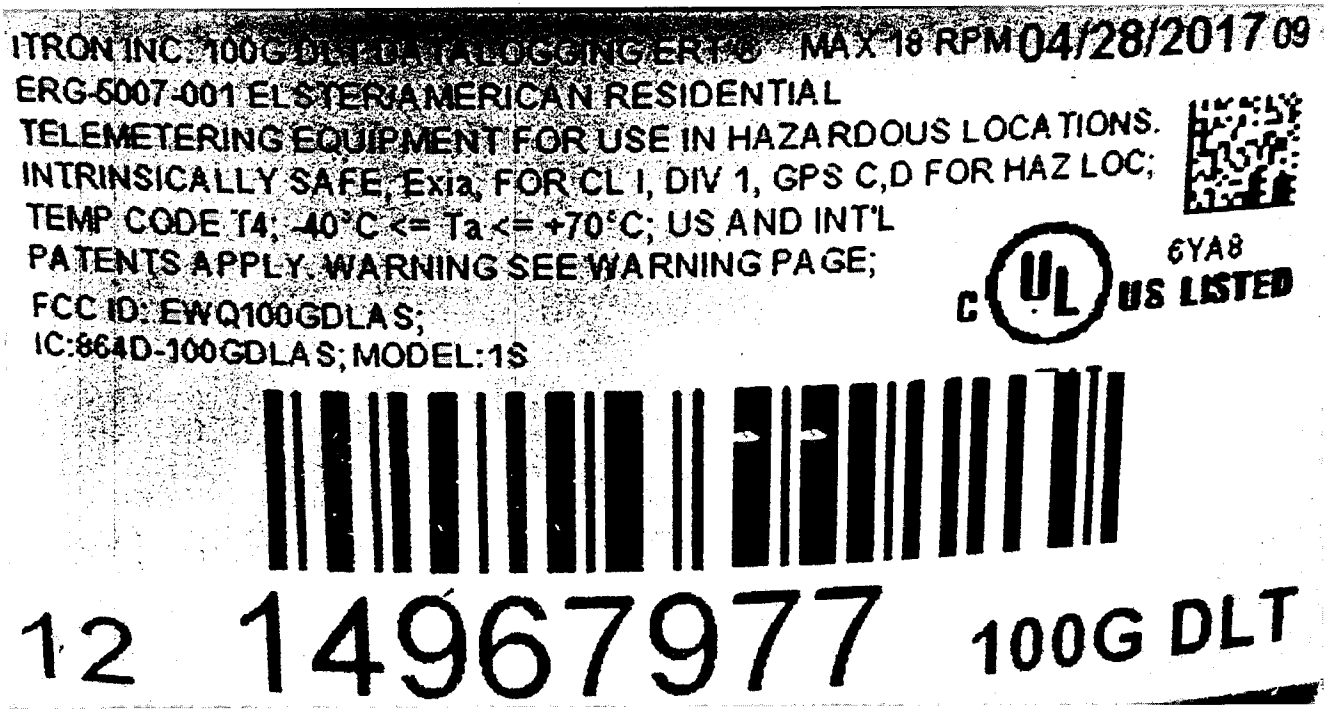

EXHIBIT B

REGULATORY COMPLIANCE REPORT

TITLE: FCC & IC MPE Report for 15.247 & RSS-210 Frequency Hopping Device
Residential FCC ID: EWQ100GDLAS IC: 864D-100GDLAS
AUTHOR: Mark Kvamme

REV	CCO	DESCRIPTION OF CHANGE	DATE	APPROVALS	
001		INITIAL RELEASE		Engineering	
				Regulatory	

REVISION HISTORY

A				Engineering	
				Regulatory	
				Engineering	
				Regulatory	
				Engineering	
				Regulatory	

Test Data Summary

FCC 15.247 / IC RSS-210; Frequency Hopping Transmitter;
100G DLS – Residential, 903MHz – 926.8 MHz for EUT
FCC ID: EWQ100GDLAS IC: 864D-100GDLAS IC Device Models (for IC): 1S,2S,8S
Part Numbers: ERG-5006-001/002/003/004/009 Serial Numbers 105,103,18
OATS Registration Number: FCC 90716, IC 864D-1

Rule	Description	Spec Limit	Max. Reading	Pass/ Fail
Parts 1.1310 & 2.1091(mobile) or 2.1093 (portable) / RSS-102 Sec 4.2	Limits for Maximum Permissible Exposure (MPE)	formula	0.161 mW / cm^2 @ 20 cm 1.61 W/M^2 @ 0.2 M	Pass

Rule versions: FCC Part 1; FCC Part 2; FCC Part 15, RSS-102 Issue 4 (03-2010); RSS-210 Issue 8 (12-2010); RSS-Gen Issue 3 (12-2010).
Reference docs: ANSI C63.4-2003; DA 00-705 (03-30-2000); OET65 (08-1997); OET65C (06-2001); IEEE C95.3-2002.

Cognizant Personnel

Name	Title
Mark Kvamme	Test Technician
Jay Holcomb	Regulatory Manager
Johann De Jager	Project Lead

CONDITIONS DURING TESTING

No Modifications to the EUT were necessary during the testing.

ANSI C63.4 - Temperature and Humidity During Testing
The temperature during testing was within +10° C and +40° C.
The Relative humidity was between 10% and 90%.
RSS-Gen 4.3: Tests shall be performed at ambient temperature

EQUIPMENT UNDER TEST (EUT) DESCRIPTION
Itron declares that the EUT tested was representative of a production unit.

EQUIPMENT UNDER TEST

EUT Module

Manuf:	Itron, Inc.
Itron p/n:	ERG-5006-001/002/003/004/009
Serial Number(s)	Listed Below
Power source	Fresh Batteries were used

Peripheral Devices
None

1.1310 & 2.1091(mobile) or 2.1093(portable) / RSS-102 Sec 4.2-Canada Safety Code 6; Table 5

Maximum Permissible Exposure (MPE)

Radiofrequency radiation exposure limits. - The criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation as specified in §1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of §2.1093 of this chapter.

1.1307 (b) In addition to the actions listed in paragraph (a) of this section, Commission actions granting construction permits, licenses to transmit or renewals thereof, equipment authorizations or modifications in existing facilities, require the preparation of an Environmental Assessment (EA) if the particular facility, operation or transmitter would cause human exposure to levels of radiofrequency radiation in excess of the limits in §§1.1310 and 2.1093 of this chapter.

Power level	unit 103 Field strength (dBuV/m)	EIRP (dbm)	unit 105 conducted power (dbm)	conducted power (watts)	antenna gain (dbi)	antenna gain numeric
3	123.08	29.08	25.16	0.328	3.92	2.47
2	120.37	26.37	21.76	0.150	4.61	2.89
1	104.84	10.84	6.09	0.004	4.75	2.99

Determine the maximum power density for the general / uncontrolled population minimum separation distance of 20 cm. (f_{MHz} / 1500 mW/cm^2 == f_{MHz} / 150 W/M^2)
The power density is calculated as:

P_d = power density in *mW/cm^2*

P_t = transmit power in milliwatts

$$P_d = \frac{P_t \times G}{4 \times \pi \times r^2}$$

G = numeric antenna gain
r = distance between body and transmitter in centimeters.

FCC Limits: 926.8MHz / 1500 = 0.618 mW / cm^2 @ 20cm
IC Limits: 926.8MHz / 150 = 6.18 W / M^2 (@ 0.2M)

Power level 3
Max antenna gain = 3.92 dBi = 2.47 numeric
Max TX power = 25.16 dBm = 328 milliwatts
results: P_D = (328 x 2.47) / (4 x pi x 20cm^2) = 0.161 mW / cm^2 @ 20 cm
W/m2 = 10 times mW/cm^2 = 1.61 *W/M^2* @ 0.2 M

Power level 2
Max antenna gain = 4.61 dBi = 2.89 numeric
Max TX power = 21.76 dBm = 150 milliwatts
results: P_D = (150 x 2.89) / (4 x pi x 20cm^2) = 0.086 mW / cm^2 @ 20 cm
W/m2 = 10 times mW/cm^2 = 0.86 *W/M^2* @ 0.2 M

Power level 1
Max antenna gain = 4.75 dBi = 2.99 numeric
Max TX power = 6.09 dBm = 4 milliwatts
results: P_D = (4 x 2.99) / (4 x pi x 20cm^2) = 0.002 mW / cm^2 @ 20 cm
W/m2 = 10 times mW/cm^2 = 0.02 *W/M^2* @ 0.2 M